

# THE THOMAS J. LONG SCHOOL OF PHARMACY AND HEALTH SCIENCES

Phillip R. Oppenheimer, Dean  
Xiaoling Li, Associate Dean, Graduate Education & Research  
Eric G. Boyce, Associate Dean, Academic Affairs  
Nancy L. DeGuire, Associate Dean, External Relations  
Linda L. Norton, Associate Dean, Operations  
Allen Shek, Associate Dean, Professional Programs  
Marcus Ravnar, Assistant Dean, Pre-Pharmacy and Pre-Health Affairs

## Programs Offered

**Master of Science in Speech-Language Pathology**  
**Master of Science in Pharmaceutical and Chemical Sciences**

**Doctor of Audiology (San Francisco)**  
**Doctor of Philosophy in Pharmaceutical and Chemical Sciences**  
**Doctor of Physical Therapy**  
**Doctor of Pharmacy/Doctor of Philosophy in Pharmaceutical and Chemical Sciences**  
**Doctor of Pharmacy/Master of Science in Pharmaceutical and Chemical Sciences**  
**Doctor of Pharmacy/Master of Business Administration**

The mission of the Thomas J. Long School of Pharmacy and Health Sciences is to prepare students for lifelong success in health careers by providing an excellent, student-centered learning environment. Students will develop their leadership skills and strong commitment to their professions and to society. We support outstanding professional and graduate teaching, research and other scholarly activity, and service as the means of achieving our mission.

The graduate programs offered by the Thomas J. Long School of Pharmacy and Health Sciences include the Doctor of Philosophy and Master of Science degrees in the Pharmaceutical and Chemical Sciences, the Doctor of Physical Therapy degree, the Master of Science degree in Speech-Language Pathology and the combined degrees, the Doctor of Pharmacy/Doctor of Philosophy and Doctor of Pharmacy/Master of Science in Pharmaceutical and Chemical Sciences, the Doctor of Pharmacy/Master of Business Administration. Each of these programs provides excellent education, training and mentoring.

## Pharmaceutical and Chemical Sciences Program

Phone: (209) 946-2405  
Website: [go.pacific.edu/pharmchem](http://go.pacific.edu/pharmchem) (<http://go.pacific.edu/pharmchem>)

### Programs Offered

**Master of Science in Pharmaceutical and Chemical Sciences**  
**Doctor of Philosophy in Pharmaceutical and Chemical Sciences**

Master of Science and Doctor of Philosophy degrees are available in five areas of interdisciplinary emphasis: Bioanalytical and Physical Chemistry, Molecular-Cellular Pharmacology and Toxicology, Chemical Synthesis, Drug Discovery and Design, Biopharmaceutical Sciences, and Pharmacoeconomics and Health Care Outcomes and Clinical Services.

The Graduate Program also offers combined PharmD/PhD and PharmD/MS degrees. These unique dual-degree programs are intended for

students who are interested in careers in research and teaching, but who wish to also possess a professional degree in pharmacy.

The goal of the Pharmaceutical and Chemical Sciences Program (PCSP) curriculum is to prepare students for the challenges of both basic and applied research, to advance knowledge in an area of specialization, to encourage fundamental discovery in the chemical, pharmaceutical and healthcare sciences, and to attain advanced degrees. Faculty from the departments of chemistry, pharmaceuticals and medicinal chemistry, physiology and pharmacology, and pharmacy practice bring their research interests and expertise to the program. Students are encouraged to combine the talents of the faculty into a unique, student-centered and interdisciplinary program that meet their individual educational goals. Upon the completion of the education from PCSP, graduates are self-motivated learners who possess broad knowledge in pharmaceutical and chemical sciences and specialized knowledge in their area of focus, as well as research and experimental skills needed for success in pharmaceutical, biotechnological, and chemical industries or academia.

## Admission Requirements

Entering students should have the equivalent of a Pacific Bachelor's degree with at least a "B" average (3.0 GPA) in all upper-division coursework. On the GRE scoring system, the minimum combined scores for verbal and quantitative sections are 303.

Depending on the research focus area, there are minimum undergraduate units required in the mathematical, physical, chemical, pharmaceutical and biological disciplines.

Students should also include an essay or personal statement that focuses on their career objectives and personal ideals, and three letters of recommendation, no older than 1-year-old.

*International Students:* In addition to meeting coursework, GPA and GRE requirements, International Students whose native language is not English must submit their TOEFL (Test of English as a Foreign Language) scores when they apply to the program. The minimum acceptable score is 550 (paper-based) or 80 (Internet-based). Those students who want to be considered for a Graduate Assistant (GAs) position, must score at least 575 (paper-based test), or 90 (Internet) on TOEFL and are required to demonstrate English speaking skills by a telephone interview. TOEFL scores can be no older than 2 years old. Students must also provide financial supporting documentation, which can be no older than 6 months old. We also accept IELTS (International English Language Testing System) scores. Students considering a GA position must score at least 7.0. The minimum score for admission is 6.5.

International students who attended schools outside of the United States must submit an evaluation of their academic records. Transcripts must be reviewed by one of the following outside evaluation agency: WES (World Education Services), [www.wes.org](http://www.wes.org), or Educational Credential Evaluators (ECE), [www.ece.org](http://www.ece.org). Please request a course-by-course evaluation that includes a grade point average (GPA) and have an official copy sent directly to the Graduate School. Student transcripts need to be translated into English before an evaluation can be processed. Please check with the evaluation agency for details on specific document requirements.

Please refer to the Admissions section of this catalog or visit [www.pacific.edu](http://www.pacific.edu) (<http://www.pacific.edu>) and go to the Office of Research and Graduate Studies web page and consult the International Applicants and Transcript Evaluation sections for up-to-date admissions criteria or for more information concerning other required application materials and instructions.

## **PharmD/MS and PharmD/PhD Programs**

This dual-degree program combines the features of the professional PharmD degree with the teaching and research components of the MS and PhD. It offers a unique opportunity for students who intend to extend their professional pharmacy training into a career in teaching and/or research. The combined program trains outstanding teachers and researchers who are in high demand for employment by industry and academia.

### **Program Description**

The PharmD/MS is usually completed in a minimum of four years and the PharmD/PhD in a minimum of five years. During the first two years, students concentrate on the PharmD curriculum, but take graduate level elective courses when possible. The Doctor of Pharmacy curriculum is described in the University's General Catalog. Students do not need to decide in which area of pharmaceutical science they will focus on when applying to the program, but they are expected to choose an area of research concentration and a research advisor by the end of their first year of study. The later years of the program are devoted to graduate course work, experiential training in the Stockton area, research, and thesis or dissertation writing. The State Pharmacy Board Exam may be taken following completion of the Doctor of Pharmacy curriculum, usually in the fourth year.

### **Admission Procedure**

The minimum requirement for admittance to the program is a BA or BS degree with a GPA of 3.0 or greater. The application process requires separate applications to the PharmD professional program and the graduate programs. The application fee for the MS and PhD programs is waived. The Office of Admission accepts two letters of recommendation and transcripts submitted with the PharmD application. Four additional items are required for admission:

1. The completed graduate application form;
2. A personal statement from the applicant stating his/her goals relative to a research and/or teaching career and selecting one of the five tracks preferred;
3. GRE scores on the General Test;
4. A letter of recommendation from someone who is familiar with the student's research abilities. If such a letter is already included in the PharmD application, a third letter from an academic person is acceptable.