

**JOINT DOCTORAL PROGRAM
IN
ENGINEERING AND COMPUTATIONAL
MATHEMATICS**

**Conducted by
California State University, Long Beach,
and Claremont Graduate University**

Contents

spring semester, although late applications are allowed at the discretion of the

Every doctoral student must

of the seven years, e.g., if transfer credit of 24 units (one year) is granted, the time limit will be six years.

The residency requirements for the Ph.D. may be met either by two semesters of full-time study in a 24-month period or by the completion of 48 units of course work within a 48-month period (including work in the summer session). There are special provisions for students transferring units as described below.

Students who receive transfer credit for 12 units or less may meet the residency requirement either by completing two full-time semesters of course work within a 24-month period or by completing 36 units within a 48-month period. Those receiving transfer credit for 13 to 24 units may meet the residency requirement by completing 24 units within a 36-month period. The seven-year maximum time period for the Ph.D. degree is reduced by six months for 12 units or less of transfer credit and by 12 months for 13 to 24 units of transfer credit.

Plan of Study

After consultation with their advisors, students are **required** before the end of the second semester, to prepare and file with the Program Committee a Plan of Study (see page 14) for completing the course requirements for the degree. The purpose of the Plan of Study is to ensure that the student is aware of the requirements for the degree. The Plan of Study should indicate the areas of study that the student will be taking in preparation for the preliminary examinations. In consultation with the advisor and Program Committee, the Plan of Study may be altered at a subsequent time by petition.

If a student withdraws from the program after completing a substantial portion of the course work, a degree at either or both institutions is still possible by satisfaction of the appropriate requirements. Both CGU and CSULB require 30-36 semester units of course work that **include** culminating experiences for degrees.

Preliminary Examinations

The student is required to pass written preliminary examinations. These examinations consist of two examination areas: **one in engineering** and **one in mathematics**. These examinations are usually taken after completion of the relevant course work at each institution. These examinations are given two or three times a year at the discretion and under the control of the Program Committee. Should a student fail an examination, they may petition the Program Committee for one retake.

Before **taking the first preliminary examination, the student is required** to complete the Preliminary Examination Permission Form (available at the CSULB website, <https://www.csulb.edu/college-of-engineering/engineering-doctoral-studies>, and see page 15). This form requires the student to specify the core areas of the Preliminary Examination; the intended dissertation advisor and the directors of the Joint Doctoral Program must sign

must be enrolled at CSULB in order to take the CSULB portion of the Preliminary Examinations.

Failure to successfully complete the preliminary examination requirement results in dismissal from the Ph.D. program. Therefore, dismissal from the Ph.D. program results from any one of the following:

For either CGU or CSULB, the student fails preliminary examination twice in the same subject.

For CGU,

after petition to the Program Committee.

Research in the CGU Institute of Mathematical Sciences

The graduate curriculum in mathematics is supported by the six mathematics departments in the Claremont Colleges Consortium: Claremont Graduate University, Claremont McKenna College, Harvey Mudd College, Pitzer College, Pomona College, and Scripps College. There are currently about fifty full-time faculty members in the six departments. A broad spectrum of courses in the mathematical sciences is offered, including: algebra, topology, geometry, analysis, numerical analysis, ordinary and partial differential equations, probability, statistics, and many specialty areas. See

Contact Information

College of Engineering

The director of the Joint Doctoral Program at CSULB is Dr. Praveen Shankar. His telephone number is (562) 985-1518; email address is praveen.shankar@csulb.edu.

The CSULB Administrator is Kim Truesdelle. Her telephone number is (562) 985-8032; her email address is kim.truesdelle@csulb.edu.

Institute of Mathematical Sciences

The director of the Joint Doctoral Program at CGU is Marina Chugunova. Her telephone number is (909) 607-9489; her email address is marina.chugunova@cgu.edu.

The CGU Administrator is Anya Istakhorov. Her telephone number is (909) 621-8080; her email address is anna.istakhorov@cgu.edu.

For CSULB, you can apply here: <https://www.calstate.edu/apply>

2. The CGU director of the CSULB/CGU Joint Doctoral Program, Marina Chugunova, reviews completed files. In the event of a negative review, a rejection letter is issued by CGU. In the event of a positive review, the

PhD in Engineering and Computational Mathematics: Plan of Study

Student:

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Research advisor:

Complete as much as you can. Details on PhD milestones may be found at <https://cgu0.sharepoint.com/sites/IMS/SitePages/PhD-in-Engineering-and-Computational-Mathematics.aspx>

1)

Describe areas of research interest, and suggest prospective PhD advisors. This plan must be submitted within one semester after passing qualifying exam, and may be updated at any time.

List any papers you have published, as well as oral and poster presentations, on subjects related to your PhD work. Include papers in submission and papers posted at preprint archives. Give bibliographic citation information for papers, and dates/locations for presentations.

This form must be submitted

